



Ø BEAT



COLO. SPRINGS,
COLORADO

MAY 1982

Less Drag on HF Mobile

NOTE: With the increasing number of HF mobile stations, a good mobile antenna is on many a ham's mind. Harry WDOFRJ sent this article in to illustrate a good idea, and we want to thank him for it.

A LOW PROFILE MOBILE MAST

Do you need a low profile mast for mobile operations on the HF bands? You can make one with very little effort. I had a Hustler mobile fold-over mast that I was not using, and decided to see if I could cut it down to a short mobile mast.

I cut the base section to 12 inches and the top section to 24 inches. (Use a hacksaw or pipe cutter.) You will not need the hinge, but you will need the hardware. I used 36 inches as my length, but you could cut it to a $\frac{1}{2}$ wave 2 meter length (38 $\frac{1}{2}$ inches) if you desire.

The hinge hardware can be removed by removing the 2 screws. Drill a small hole $\frac{1}{4}$ inch from the cut end of the top section and replace the hinge hardware to the top section. Use a $\frac{1}{2}$ or $\frac{3}{4}$ inch self-tapping screw to hold the top section and hinge hardware together. Place the locking sleeve over the base section and insert into the parts now attached to the top section.

Drill another hole, using the hole in the hinge hardware as a guide, and insert another self-tapping screw. Slide the locking sleeve into position and you now have a very solid low profile mast for your mobile operations.

I use the Hustler resonators on this mast and adjusted them to a 2:1 or less SWR. This low profile mast works like a dream, so give it a trial. It will reduce the antenna wind drag and make HF mobile more fun.

73's
Harry WDOFRJ

MEETING NOTICE

The May meeting of the Pikes Peak Radio Amateur Association will be held on May 12 at 7:30 p.m. at the First United Methodist Church at Boulder and Nevada. The program will be given by a representative from the Utilities Department and will be on safety around power lines etc. Since it is the season for raising antennas it might be worthwhile to refresh your memory about the danger of overhead lines and the best way to deal with them. Members and other interested persons are invited to attend.

SWAPFEST

The Rocky Mountain Rendezvous Swapfest sponsored by the Mountain Amateur Radio Club will be held on July 17 & 18. Location is the Red Rocks campground 3 miles north of Woodland Park on Highway 67. Selling spot is \$3.00 for 1 or 2 days. Buyers are free. Come prepared for summer mountain weather. Camping is encouraged. Spaces on first-come basis. Water and latrines are available. For further information contact NØBXI Tony Kovacevic 687-3954 or NØCMD Joe Tafoya 687-3641.

ARTICLE SOLICITATION

Zero Beat is always looking for articles to print. This newsletter is the most visible part of our organization and should reflect the interests of the membership. If you have a good mod for a rig, a "the way it was" story, computer program, project or whatever, write it up and send it to the editor. Help make Zero Beat a viable, dynamic publication!!

P.P.R.A.A. DIRECTORS

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(*Two-year board terms began October 1981)

ZERO BEAT is published monthly in the interest of the members of the Pikes Peak Radio Amateur Association, Inc., Colorado Springs, Colorado. Permission is given to reprint articles or excerpts provided credit is given. Deadline for submission of articles is the 21st of the month. Classifieds accepted anytime.

The Pikes Peak Radio Amateur Association meets on the second Wednesday of every month at the First United Methodist Church, 420 N. Nevada, at 7:30 p.m. All amateurs and interested parties are invited to attend.

Editor: Don Lohse KBØKQ, 1410 E. LaSalle, Colorado Springs, CO 80907 635-7469

MEETING MINUTES

The Pikes Peak Radio Amateur Association's regular monthly meeting was called to order by president Al Bailey, ADØZ, at 7:45 p.m. on April 14, 1982. Introductions of those present were made and the March meeting minutes were accepted as written.

Doug, WBØMHP, reported \$2012 in the treasury with two months of Zero Beat left to pay. The Public Relations committee reported potential interest by one of the local TV stations in covering the upcoming swapfest. Rosie, WAØMNL, suggested a "30 years ago" article to document amateur activity in Colorado Springs. The education committee reported that the final novice class until this fall is in its third week with five or so weeks left to go. Don, KBØKQ, and Dave, NØDV, are holding these classes on theory and code on Tuesday and Thursday evenings from 7:30—9:30 at North Junior High School in room #107. Please come down and meet the people in these classes.

The RFI committee reported one instance of television receiver front-end overload during the month. Discussion followed concerning the possibility of local cable tv's use of channels E and K — 144 and 220 MHz — to expand their coverage. The proximity of the enclosed cable system to amateur radio stations creates some interesting potential for interference problems.

The agenda for the May 1 meeting of CCARC with the minutes of the last meeting has been delivered to the Zero Beat editor. Anyone wishing to attend the meeting should contact Bud, NØDDF.

Discussion followed about the May 18 Swapfest. Everyone's participation is needed to make this event a success. During the talk about preparations, it was moved and seconded that the boards judgment on purchasing major door prizes be accepted. The motions passed.

Two sign-up sheets were passed around for those in attendance: Walk for Mankind Communications and Field Day. Mike Stansberry, KØTER, is heading the communications group for the Walk for Mankind to be

held on May 8. Field Day is the last weekend in June (26, 27) and several people are needed to be in charge of site selection and the various stations to be set up.

After a short break, there was a program on transmitter hunting techniques and equipment. Two different antennas and techniques for using them were presented. It remains for the hunter to decide whether to use the peaking of yagi or the nulling of phased dipoles to find his prey. Whichever method you think will work best, show up for the next transmitter hunt on May 2. We'll meet in the parking lot near Godfather's Pizza on East Fillmore at 12:30.

The meeting was adjourned at 10:00 p.m.

Respectfully submitted,
Greg, KAØFOZ


Typesetting courtesy Letter Setters

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TECHNICAL TEST (Level 2)

Soldering is to be done using a:

- A Soldering Iron
- B Wooden Match
- C Curling Iron
- D Propane Torch

The term 60—40 solder refers to:

- A 60% of solder on joint/40% on floor
- B The solder melting at 6040°
- C 60 lbs. of solder will perform 40 solder operations
- D IQ range of person taking this test

"Cold" solder joints are acceptable if:

- A Used in Alaska
- B Heated prior to use
- C Are unavoidable since there is no cure for the cold
- D Pist is used in the battery

If an improper solder joint occurs, you should:

- A RDR it
- B Order a new one
- C Crimp solder cup around the conductor—that'll hold it!
- D Turn yourself in to a security guard for disciplinary action

An electrical wire should be connected to a relay hook:

- A Using velcro (if electrical conductivity is not impaired)
- B Using a clove hitch & square knot
- C By welding, if adequate heat sinks are used
- D By wrapping wire around hook & allowing it to corrode together

Sin flux should be removed by:

- A Glass beading
- B Machine washing & tumble drying with low heat
- C Repeated licking
- D Picking off with thumbnail

TNX to Les KCØNC

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RADIO SCHOLARSHIP

The Foundation for Amateur Radio, Inc., a non-profit organization with headquarters in Washington, D.C., plans to award nine scholarships for the academic year 1982—1983. The Foundation, composed of fifty local area amateur radio clubs, fully funds two of these scholarships from the proceeds of the Gaithersburg (MD) Hamfest. It administers, without cost to the donors, two scholarships for the Quarter Century Wireless Association and one each for the Richard G. Chichester Memorial, The Radio Club of America, the Young Ladies' Radio League, the Edmund B. Redington Memorial and the Amateur Radio News Service. The last named award is new this year.

Radio Amateurs holding at least an FCC General Class license or equivalent may compete for one or more of these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled or have been accepted for enrollment in an accredited university, college or technical school. The scholarship awards range from \$300 to \$900, with preference given in some of them to residents of specific geographical areas or the pursuit of certain study programs.

Additional information and an application form can be requested by a letter or QSL/postcard, postmarked prior to May 31, 1982 from:

Hugh A. Turnbull, W3ABC
6903 Rhode Island Avenue
College Park Maryland 20740

The FOUNDATION is devoted exclusively to promoting the interests of Amateur Radio and to the scientific, literary and educational pursuits that advance the purposes of the Amateur Radio Service.

BOARD MINUTES

The board meeting of the Pikes Peak Radio Amateur Association was called to order at approximately 7:30 p.m., April 19, 1982. Those present were Al ADØZ, Doug WBØMHP, Les WDØGTA, Tom ADØO, Karl K4DQ, Mark KAØJXW, Don KBØKQ and Dave NØDV.

A report was made concerning the outcome of the Swapfest. About \$1100 was realized and is broken down as follows: concessions \$347, bake sale \$50, raffle \$202, tables \$159, auction \$305, and odds and ends \$41. Discussion centered on changes for next year in terms of space, prizes, and needs for organizing for next year a motion made by Doug — seconded by Al — that the club set aside a reserve of \$350 to cover expenses for door prizes at the next swapfest. The motion passed unanimously.

The picnic this year was the next topic. The date was set for July 18th with the 25th as an alternate date. Attempts will be made to procure the Black Forest site which had been used last year.

A motion made by Doug — seconded by Al — to buy all condiments was defeated 4—2.

A motion — by Doug, seconded by Tom — to do as last year and buy only pop, chips, and beer for the picnic carried unanimously. It was also noted that those planning to attend the picnic should notify the club by July 1st.

Dave notified the club that Cliff Upton WØLME, 4031 S. Loring Cr. had donated a tri-band antenna. Tom offered to pick it up.

A.E.S. Communications

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A transmitter hunt is to be held May 2 with Doug as the fox.

Programs for upcoming months were decided upon. They are: May — Power Line Safety (a technician from the utility department will be present); June — National Weather Service — tornado and thunderstorm season; July — Components; August — satellites; September — contesting; October — elections; November — ARRL films; December — home brew night.

Al moved the club show officially its appreciation to the people who worked at the Swapfest in some way more than a general letter in Zero Beat, Mark seconded. The motion was tabled on a 3—3 vote.

Mark brought up the infamous box of "stuff" and discussion involved the splitting up of old business material and that material that has historic value.

Don addressed the board concerning the submission of the minutes to Zero Beat and also made several general comments on the club and activities.

Dave also addressed several comments to the board. Included was the mention of the great need for volunteers to help with Field Day at the end of June. Much work needs to be done by several people if FD is to be a success.

Doug moved that the club reimburse Dave for the code tapes he is making for the novice classes. The vote was unanimous in favor of the motion.

There being no further business, the meeting was adjourned at approximately 10:00 p.m.

Respectfully submitted,
Mark KAØJXW

WALLPAPER

Montrose Amateur Radio Club will offer a certificate for a large SASE on the commemoration of the Montrose Colorado Centennial. Station to work WOINS on phone: 7250, 14300, 21375. CW contacts KJOG: 7050, 14050, 21050. Times to make contacts: 0000Z 21 May 2400Z 22 May. All interested hams should try for contact on dates, times and frequencies mentioned. Send SASE to station worked.

WDØBFZ

MILEY'S RADIO

719 W. 7th St. Florence, Colorado 784-3040

w Kenwood TS 530S \$659.
 .FJ 260 300W dry dummy load \$25.
 MFJ 250 2KW dummy load (transformer oil-no PCB) \$28.
 Bearcat 210 XL 18 channel programmable scanner AC/12V \$229.
 Regency K100 10 channel programmable scanner.
 Reg. \$269 Sale \$169 while they last.
 AEA Isopole 144. List \$49.95 Sale \$39.95
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 Kenwood TR-7730 mini 25W \$287.
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 New Santec 440 MHz HT \$345.
 Icom 25A mini size 2M w/TT mic Reg. \$369 Now \$299.
 Icom 2AT HT w/ wall chgr, TT pad, nicads, duck Reg. \$269 Now \$235.
 Icom 2A same as above w/o TT pad Reg. \$239 Now \$214.
 Extra Icom batteries, chrgs. & etc. in stock.
 Azden PCS 3000 w/ TT pad \$288.
 Azden PCS 2800 10M FM \$288.
 KDK 2025 25W w/ TT mic \$269.
 New Azden PCS 300 HT \$288.
 Commodore VIC 20 Home computer of the 80's.
 List price \$299.95 Sale \$250
 Azden PCS 3000 w/ TT pad \$275.
 Wilson MK 4 6 ch HT, wall chgr, 1 xtra battery, TT pad \$125.

(2) Wilson 1402 5M HT \$100.
 w/ desk charger \$125.
 Heath 2 meter linear \$30.
 Icom 211 2 meter FM-CW-SSB, AC & DC \$300.
 Drake R4A, T4X, M5-4 p/s & spkr. Transceives as pair & ETEK FR-4
 Digital Readout. All cables, extra set of all tubes including
 finals. All for \$575.
 7 xtra crystals with R4A
 R4A separate \$225.
 T4X separate \$225.
 FR4 Digital Readout \$150.
 Swan WM 3000 2KW peak reading watt/SWR meter 110 AC \$50.
 Hallicrafter SX 110 Gen. Cov. Rcvr. \$65.
 ARRL Publications & Bash books
 Rohn towers at special prices
 Belden 8214 RG 8U foam lit 55¢/ft. sale 40¢ ft.
 Belden RG 8X foam 20¢/ft.
 Consignment accepted at sliding commission rates.
 Equipment up to \$200 @ 10% \$300 @ 8% \$400 @ 7%
 \$500 @ 6% \$800 @ 5% \$900 and up @ 4%.
 Hallicrafter HT 37 80-10 mtr. transmitter w/ TR relay \$100.
 Homebrew 900W linear. 4-611A's, small sized and good power.
 P/S 9" w X 13 1/2" d X 12 h. Amp 10 w X 14 d X 11 h \$150.
 Yaesu YO 101 Monitorscope \$150.00
 Free with \$5.00 or more purchase 1 ARRL Mini Log.

ADVERTISING NOTICE

Zero Beat will gladly run any classified ad submitted to it. However, classifieds will run for one month only, unless the advertiser notifies Zero Beat to continue the ad. If more than one item is listed, please keep us informed as to what sold, so that the ads are accurate. Commercial advertisers are welcome to change or update their ads whenever necessary. The ads in Zero Beat are useful to our readers, let's keep them up to date and accurate.

FOR SALE: Two meter FM station. ICOM IC-2AT hand-held with 16 button TT pad and accessories, \$230. ICOM IC-280 10 watt mobile with TT mike, \$250. Larsen mag mount with 5/8 and 1/4 wave antennas, \$10 with IC-280. Standard 146T hand held with remote mike, TT pad and charger, \$80. Call Bob, N2ARH, 599-5310.

FOR SALE: SBE 34 (80-15 SSB), SBE SB2-LA Linear Amplifier, Swan Cygnet 300B, Knight T-60 (AM & CW transmitter 80-6), Clegg 22'er (AM only), Heath SB 610 Monitor Scope, 2 muffin fans. 45 year collection of QST 1/1935-12/1979, CQ Magazines back to 1945. All rigs in excellent condition. Rose Ebel KAG/EMV, 599-8842.

FOR SALE: Incline weight bench with leg curl and squat set ups w/ 108 lbs. of plastic weights, one straight barbell, 2 dumbbells, one curl bar, new price \$150, sale \$100. Jerry Miley 784-3040.

FOR SALE: Standard H/T 146A, desk fast charger, 16 TT pad installed, extra xtals — \$60/offer. MODEL 15 TTY with all manuals, needs selector cam — \$20. CV-89/URA-8A rec xvtr for RTTY — \$15. Call Donn, WA8WXF, 472-6040 evenings.

FOR SALE: Swan 400 with AC/DC power supply and mobile VFO. Recent factory reconditioned. \$200. Regency HR 212 2M transceiver \$40. Dave NØDV 473-0293.



**Zero Beat editor without
your help.**

NOTE: Articles concerning technical information are printed in Zero Beat for the consideration of readers. Zero Beat does not vouch for the accuracy of data or applications of that data.



Ø BEAT

May, 1982

COLO. SPRINGS,
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Don Lohse KBØKQ
1410 E. LaSalle
Colorado Springs, CO 80907



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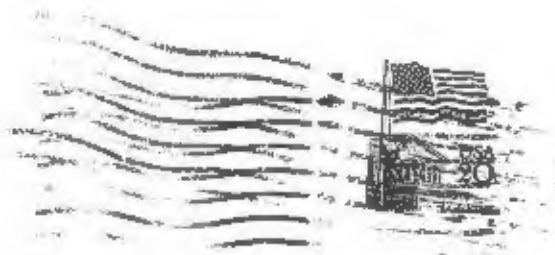
P.F.R.A.A. MEMBERSHIP LIST

NAME	Sort---	Exclusions:X	Membership:A		27 Apr 82		F.	1
llen-Jr,Bill	KF0W	1341	Doyle Pl	Colo	Specs	CO	80915	597 3324 EA
usenstein,Larry		4938	Garden Ranch Dr	Colo	Specs	CO	80907	599 7844 NA
alley,Allen	AD0Z	2715	Alteza Ln	Colo	Specs	CO	80917	EA
iss,Charles	KA0MDQ	302	Quebec St	Colo	Specs	CO	80911	392 1476 NA
orst,Les	WD0GTA	2542	E Bijou	Colo	Specs	CO	80909	634 3995 AA
retae,Mel	N0BWN	3303	N Hancock, Lot 15	Colo	Specs	CO	80907	630 8019 GA
otelain,Don	WD0BSZ	1470	Loflin Rd	Colo	Specs	CO	80909	683 2883 A
olvin,Charleen	WB0YOB	4610	Topaz	Colo	Specs	CO	80918	598 7704 A
olvin,Jim	N0RVY	4610	Topaz	Colo	Specs	CO	80918	598 7704 GA
ale,Larry	W0RXP	2222	Afton Way	Colo	Specs	CO	80909	635 7039 GA
ly,Bob	WB5ZJO		Drawer D	Angel Fire	NM		87710	377 2229 GA
reiler,Frank	WB0PAJ		The Satellite A-208	Colo	Specs	CO	80910	596 6800 EA
aden,Robert	N7BTF	613	William Av	Colo	Specs	CO	80906	471 3179 TA
oll,Wayne	WB4QGM	492	Selfridge Dr	Colo	Specs	CO	80916	597 8787 AA
ansen,Harley	KA0NDE	2029	N Wahsatch	Colo	Specs	CO	80907	634 4553 NA
erren,Faye	KB00I	3018	W Kiowa	Colo	Specs	CO	80904	632 4574 AA
olloway,Ken	KA0DST	5330	Constitution	Colo	Specs	CO	80915	A
ackson,Jack	KA0HHH	718	E. Columbia	Colo	Specs	CO	80907	633 3339 NA
acobs,Jake	N0CYR	104	Old Broadmoor Rd	Colo	Specs	CO	80906	GA
oepf,Harry	W0RTB	2107	Parkview Blvd	Colo	Specs	CO	80906	633 2882 AA
William	W1THA	903	W Jefferson St	Colo	Specs	CO	80907	471 2234 GA
edora,Roger	K0KRG	3343	W Bijou	Colo	Specs	CO	80904	473 6823 AA
ewis,Rosemarie	WA0MNL	2701	Robinson D-13	Colo	Specs	CO	80904	632 5721 AA
ibensood,Bud	N0DDF	384-G	W Rockrimmon Blvd	Colo	Specs	CO	80907	599 7699 A
onse,Don	KB0KQ	1410	E LaSalle	Colo	Specs	CO	80907	635 7469 AA
ohse,Joyce	KA0GJN	1410	E LaSalle	Colo	Specs	CO	80907	635 7469 NA
arciano,Joseph	K00BK	1214	Auburn Dr	Colo	Specs	CO	80909	597 0825 AA
oCarty,Jack	N0CYS	2610	E Bijou	Colo	Specs	CO	80909	633 3479 GA
oIntyre,Barb	WA0FEQ	2838	Dawn Dr	Colo	Specs	CO	80907	593 0457 GA
oans,Ed	W0YQ	212	N Farragut	Colo	Specs	CO	80909	473 6174 EA
iller,Dave	WD0ODU	4915	Galena	Colo	Specs	CO	80918	475 7650 AA
iller,Norman	WD0HCL	2226	Alpine	Colo	Specs	CO	80909	634 7574 A
oloney,Doug	WB0MHP	3817	Vauvero Cir So	Colo	Specs	CO	80918	599 9605 AA
ewmyer,David	AF0S	4770	Rusina Rd #307	Colo	Specs	CO	80907	598 3043 EA
oirier,Bob	K0DJ	1884	Pepperwood	Colo	Specs	CO	80910	574 0488 EA
uintana,Joe	KA0NPJ	308	N Foote	Colo	Specs	CO	80909	635 2251 NA
ichardson,Mark	KA0JXW	24	N Union	Colo	Specs	CO	80909	473 1799 NA
iese,David	WB0SDW	1405	Diana Ln	Colo	Specs	CO	80909	635 9593 GA
iese,Dona	KA0RFU	1405	Diana Ln	Colo	Specs	CO	80909	635 9593 NA
obertson,Wayne	WD0BJV	205	N 14th St	Colo	Specs	CO	80904	634 1021 NA
phaarschmidt,Steu	K0CI	2208	E Greenwich Cir	Colo	Specs	CO	80909	596 6594 EA
ellers,Duane	N7BTE	P O	Box 13312	Colo	Specs	CO	80913	GA
ons,Leon	WA6SID	3615	Reis St	Colo	Specs	CO	80909	574 5535 A</

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55 names printed.

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